

- 13 -

CLAIMS

1. Process for obtaining finished granules of a predetermined substance in a granulation fluid bed (F1) of the so-called vertical growth type, said bed being formed and maintained by a respective flow of fluidification air, comprising a transfer phase by falling of said finished granules in a pressurized space below said granulation bed and a recovery phase of said granules from said pressurized space, characterized in that said recovery phase comprises:
- 10 - a) the formation in said pressurized space of a collection fluid bed of said finished granules, through at least part of said fluidification air; and
- b) extraction in continuous flow of said finished granules from said collection bed (F2) and from the respective pressurized space, placing the base plate of said collection bed (F2) in fluid communication with a well (45), outside said pressurized space, fed substantially upstream from the finished granules of said collection bed (F2).
- 15
2. Process for obtaining finished granules of a predetermined substance according to claim 1, characterized in that all of the fluidification air of the granulation fluid bed (F1) is used for the fluidification of the collection fluid bed (F2) for the finished granules.
- 20
3. Apparatus for obtaining finished granules of a predetermined substance in a granulation fluid bed (F1) of the so-called vertical growth type comprising a self-supporting structure (2) substantially shaped like a container, defining a space (A) inside of it, in which a shelf (9) is positioned, equipped with a plurality of
- 25
- 30

- 14 -

- classification slits (9a) and intended to support a granulation fluid bed (F1), characterized in that it comprises, in said space (A), a base plate (7), permeable to gaseous flows, extending below and in a predetermined spaced relationship from said shelf (9) until it goes beyond a wall (5) of said container (2) by a portion of predetermined length, said base plate (7) being intended to support a respective collection fluid bed (F2) of finished granules, a well (45), open at the top, extending outside of said space (A) and in fluid communication with it through a passage (25) provided in said wall (5) at said base plate (7), means for feeding (14, 80a) a flow of fluidification air, a distribution chamber (8, 80) of said fluidification air in said space (A) and in said well (45).
4. Apparatus according to claim 3, wherein said wall (5) has a lower side (5a), spaced from said base plate (7) defining said passage (25) which places the aforementioned space (A) in communication with the outside of said container (2).
5. Apparatus according to claim 3, characterized in that said well (45), comprises a vertical panel (35), outside of said space (A), in a predetermined spaced relationship to said front wall (5) and preferably parallel to it, fixed to said base plate (7).
6. Apparatus according to claim 3, characterized in that, associated with said base plate (7), in a predetermined spaced relationship from it, there is a second base plate (7a) provided tilted on said base plate (7) and converging towards said vertical panel (35), to define said distribution chamber (8) of said fluidification air.

- 15 -

7. Apparatus according to claim 3, characterized in that said base plate (7), permeable to gas flows, intended to support a respective collection fluid bed (F2), extends in said well (45) and inside said space (A), going beyond said wall (5) by an appropriate predetermined portion of limited length, said apparatus comprising transportation devices (30) of the finished granules, to feed said finished granules, transferred from the granulation fluid bed (F1), to said collection fluid bed (F2), said transportation devices (30) being provided in said space (A) below said shelf (9) of the container (2).